

Project Coordination Required YES\_\_\_ NO\_\_X\_\_

#### **4. Service Inquiry & Ordering Guidelines**

Requests for PBX Trunk Service should be sent to your Account Team.

The following information is needed to order PBX Trunk Service:

- Customer's name and address
- Telephone number of PBX (for existing service)
- Requested Service date
- Type PBX (for new service)
- Number of PBX Trunks
- Type of PBX Trunks (Flat, Message, Measured)
- If Measured, type of measured (see state tariff)
- Direction of PBX Trunk (inward, outward, combination inward/outward)
- Type of dialing service (TouchTone or Rotary)
- Type of signaling (Ground Start or Loop Start)
- Design or Non-Design

#### **5. Customer Education:**

**A. Availability of Material:** N/A

**B. Training Availability:** N/A

**C. Costs:** N/A

**D. How To Order:** N/A



## **REMOTE CALL FORWARDING**

# Remote Call Forwarding CLEC Informational Package

## 1. Service Description

### A. Basic Service Features

Remote Call Forwarding (RCF) is an exchange service that allows incoming calls to be forwarded to a telephone number at another location.

The RCF number has one access path which allows only one call, at a time to be forwarded. Additional access paths can be ordered to allow additional calls to be forwarded, provided the distant location is equipped to receive them. RCF requires neither a physical telephone set nor input by customer to get calls forwarded.

### B. Basic Service Capabilities

Remote Call Forwarding service forwards all incoming calls to an alternate telephone number and location.

## 2. Tariff References/Price References

### A. Tariff References

General Subscribers Service Tariff (Section A.13)

### B. Pricing Structure And Description

- All Additional or Foreign Listings at existing tariff rates
- All long distance charges apply when RCF is a long distance number
- One month minimum charge
- When additional access paths are established with the initial installation of RCF service, the Installation charge for additional access paths must be waived.

## 3. Installation Intervals

For Remote Call Forwarding	YES	NO
Normal Installation Intervals	X	
Project Coordination Required		X

#### 4. Service Inquiry & Ordering Guidelines

Orders for this service/product should be submitted to the LCSC via fax or Electronic Data Interchange (EDI) process. Below are the USOCs associated with this Service.

##### USOC's

Type Of Service	Description	Class Of Service	PIC
Measured Local (except GA)	Calls Forward within local calling area and are usage based	RCFVF	N
Measured Local (GA only)	Calls forward within local calling area	RD5VF	N
Additional Access Path	Forwards additional call to the CFN	RCA	NA
Intrastate/InterLATA	Calls forward within state to different LATA	RCFVQ	Y
Interstate	Calls forward to another state	RCFVE	Y
Interstate/IntraLATA	Calls forward to another state in same LATA	RCFVU	N
Interstate/IntraLATA/Intraexchange	Calls forward to another state in same LATA and same local exchange	RCFVG	N
Area Calling Service (except GA & FL)	Calls forward within same exchanges as Area Calling Service Plans and are usage based.	RCFVD	N
Local Optional Service Option B (LOSB LA only)	Calls forward to an exchange within the LOS Band B service area	RCFLB	N
Canada	Calls forward to Canada via Toll Call (not to 800 or 700 numbers)	RCFVN	Y
Intrastate/IntraLATA	Calls forward within State in same LATA	RCFVS	N
800 Intrastate/IntraLATA	Calls forward to 800 number within state in same LATA	RCFWS	N
800 Interstate	Calls forward to 800 number in another State	RCFWE	N
800 Interstate/IntraLATA	Calls forward to 800 number in another state in same LATA	RCFWU	N
800 Intrastate/InterLATA	Calls forward to 800 number within state in another LATA	RCFWQ	N
800 Interstate/IntraLATA/Intraexchange (FL,NC,SC only)	Calls forward to 800 number in another state within same LATA and same exchange	RCFWG	N
700 Intrastate/IntraLATA	Calls forward to 700 number within state	RCF7S	N

Type Of Service	Description	Class Of Service	PIC
	in same LATA		
700 Interstate	Calls forward to 700 number in another state	RCF7E	Y
700 Interstate/IntraLATA	Calls forward to 700 number in another state in same LATA	RCF7U	N
700 Intrastate/InterLATA	Calls forward to 700 number within state in different LATA	RCF7Q	Y
700 Interstate/intraLATA/Intraexchange	Calls forward to 700 number in another state in same LATA and same exchange	RCF7G	N

#### Fourth Character

V - Business Service, R - Residence Service, W - 800 Service, L - Used with Local Optional Service Option B (LOSB) in Louisiana, 7 - 700 Service

#### Fifth Character

E - INTERSTATE forwards across state and LATA

U - INTERSTATE/INTRALATA forwards across state boundary but within same LATA

Q - INTRASTATE/INTERLATA forwards within state boundary to different LATA

S - INTRASTATE/INTRALATA forwards within same state and LATA

N - CANADA forwards to Canada

F - LOCAL - MEASURED forwards within same or different local exchange on measured basis

D - LOCAL -AREA CALLING SERVICE forwards within local calling area and billed at applicable Area Calling service rates (NOT OFFERED IN ALL STATES consult A3 Tariff for your state to verify if available)

G - INTERSTATE/INTRALATA/INTRAEXCHANGE forwards within same exchange and LATA between states

B - Used with Local Optional Service Option B (LOSB) in Louisiana

#### 5. Customer Education (CLEC & End User)

None required for this service.



## **RINGMASTER® SERVICES**



2/19/97

## **RingMaster® Services** **CLEC INFORMATIONAL PACKAGE**

### **1. Service Description**

#### **A. Basic Service Description - RingMaster® Services**

**B. Basic Service Capabilities** - RingMaster I and II services are optional network features, which are offered on a subscription basis. RingMaster service allows additional telephone numbers working on one line to provide different ringing patterns, allowing the customer to screen incoming calls.

#### **C. Feature Interaction**

**RingMaster I** - enables customers to have two different directory numbers to share the same line/same address, with each number having a distinctive ring. By having RingMaster service, a customer is able to know who the call is for or who is calling by the type of ring. If a customer wants RingMaster service to provide an additional number and distinctive ring for use with a FAX machine or modem, a customer must purchase a piece of customer premise equipment (CPE) known as a Ring Decipher.

**RingMaster II** - the same as above with two additional telephone numbers.

### **2. Tariff Reference**

GSST, SECTION A13.

### **3. Installation Intervals**

The intervals for service activation in the wholesale arena will duplicate the procedures and intervals used in the retail environment.

Normal Installation Intervals      Yes ☒ No ☐

Project Coordination Required      Yes ☐ No ☒

### **4. Service Inquiry & Ordering Guidelines**

Orders for this service/product should be submitted to the LCSC via fax or Electronic Data Interchange (EDI) process.

### **5. Customer Education (CLEC & End User)**

None required for this service.



## **SMARTPATH<sup>SM</sup> SERVICE**

## **SMARTPath<sup>SM</sup> Service CLEC Information Package**

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### **Service Description**

SMARTPath service is a premium, shared high capacity fiber-based digital service, capable of providing DS1 transport with high performance and reliability parameters. SMARTPath service is offered in high density areas within key wire centers of selected metropolitan areas. SMARTPath service provides a seamless end-to-end service at high levels of redundancy/diversity to prevent a single service impacting event from interrupting customer service.

SMARTPath service is distinguished by a high degree of reliability and survivability. SMARTPath service provides a 1.544 Mbps transport link over a shared high capacity network service. The inherent attributes of the service will meet the demands of high performance and service continuity for customers located in high risk areas with high concentrations of demand. SMARTPath service is guaranteed against catastrophic failure, in that the monthly recurring charge is automatically refunded if a service interruption lasts over 60 seconds. SMARTPath service areas and available service locations will be designated where the infrastructure supports the attributes of the service to provide specified levels of performance and reliability.

SMARTPath service areas are identified in the National Exchange Carrier Tariff (NECA) FCC No. 4.

The infrastructure which supports SMARTPath service is fiber based and utilizes a self-healing architecture which provides both link and nodal protection in order to limit single points of failure. SMARTPath service is a digital transmission service that incorporates SONET technology to transmit Private Line intraLATA signals.

SMARTPath services use an array of architectures to meet the requirements of the service. All components of the service are protected and may include based upon a customer's service architecture:

- Local Loop
- Interoffice Facility
- Facility Electronics
- Serving Wire Center (Central Office)
- Foreign Wire Center (Central Office)

**Local Loop Facility Protection** - This includes protection from failure due to a single event (e.g., a cable cut). This entails provisioning the protection path on a different route from the primary. Protection exists from the service access point outside the serving central office to the first service access point outside the customer's premises.

**Interoffice Facility Protection** - As with local loop protection, this is protection from a single event failure. It also implies provisioning separate paths for the working and protection channels in the interoffice network and implies separate sheaths and outside plant structures from the first access point of the serving central office to the first access point in the destination central office.

**Facility Electronic Protection** - The electronics used with the service should have automatic switching capabilities to switch to redundant backup equipment in the event of equipment or facility failure.

**Serving Wire Center Protection** - With the use of the alternate Serving Wire Center arrangement, the DS1 services which extend beyond the Serving Wire Center will survive the loss of the Serving Wire Center.

**Foreign Wire Center Protection** - A Foreign Wire Center is any wire center which this service will transmit to reach its destination beyond the serving wire center. This excludes the destination point of the service.

In addition to reliability and survivability, the attributes of SMARTPath service provide other major benefits to the customer.

#### Higher Levels of Performance

- meet or exceed 99.99% circuit availability on an annual basis
- meet or exceed 99.95% circuit availability on a monthly basis
- meet or exceed .009% severely errored seconds on a monthly basis.

#### Link Connectable

- SMARTPath service can be provided in conjunction with service arrangements for SMARTRing® service, LightGate® service, FlexServ® service, Expanded Interconnection Service® (EIS), and MultiServ® service.

#### Reduced Cost

- Within a SMARTPath service Area, SMARTPath service arrangements are flat rated which results in lower cost for many configurations.

#### A Strong Service Guarantee

- **Service Installation** -- SMARTPath service will be installed on the negotiated due date or the nonrecurring installation charges will be refunded.
- **Service Continuity** -- In the event of a primary facility failure, SMARTPath service is guaranteed to switch to an alternate facility path in 60 seconds or less. Failure to do so will result in one hundred percent 100% of the monthly recurring charges automatically being refunded.
- Continuous Performance Monitoring will be provided with SMARTPath Service arrangements to ensure all levels of performance.

Note: The credit will apply no more than once per calendar month. The combined total of credit allowances during a month for failure to meet performance guarantees shall not exceed the monthly rate for the service. In addition to these guarantees, there are performance objectives related to circuit availability and error-control.

The characteristics of SMARTPath service can be summarized as:

- DS1 service
- Fiber-based facilities
- Redundancy/Diversity
- Shared Service
- Service Guarantee
- Self-healing
- Point-to-Point
- Continuous performance monitoring

SMARTPath service is configured based on two basic rate structures:

- **SMARTPath Area Connection:** Provides for the originating connection at the designated customer premises where the customer gains access to the SMARTPath service network, and transport to a designated junction in the same SMARTPath service area.
- **SMARTPath Area Junction:** Provides for the terminating connection between the SMARTPath service network and:

- Another customer premises in the same SMARTPath service area, or,
- A serving wire center in the same SMARTPath service serving area for connecting to another service or an interconnecting collocator.

### **Architectural Alternative #1**

The architectural alternative described here is targeted at provisioning stand-alone local channel demand. A stand-alone local channel demand connects the customer's premises to its normal serving wire center. A significant portion of the special access DS1s falls into the stand-alone local channel category to interconnect with other BellSouth provided services such as LightGate service, SMARTRing service, or FlexServ service.

This alternative utilizes a traditional point-to-point fiber system with fiber optic terminals at the customer location and the serving central office. The fiber facilities for the working path of this system are routed physically diverse from the protection path. This facility arrangement is an embedded architecture. Most of the embedded fiber optic terminals are asynchronous (generally 90MB or 180MB). Going forward all new fiber optic terminals should be SONET, operating predominantly at the OC-3 and OC-12 rates for this application. The existing asynchronous fiber optic terminals will require the addition of a stand-alone performance monitoring device to ensure the performance objectives are being met. On the SONET based systems, performance monitoring will be furnished using the DS1 enhanced PM card. A DS1 interface will exist at both the customer's premises and the central office location.

From a SMARTPath service perspective, the endpoints of the demand for a stand-alone local channel are the customer's premises and its serving wire center. Therefore, link protection alone is all that is required to support this type of demand. When the endpoint of a DS1 demand extends beyond its serving wire center, this architecture fails to meet the requirement of limiting a single point of failure.

Each existing facility serving arrangement must be verified to ensure that it meets the local loop facility protection criteria, that is, separate cable and physically separate outside plant structures.

### **Architectural Alternative #2**

This serving arrangement is a basic SONET ring consisting of several nodes and interconnecting with other facilities at a single point. Nodes on this ring include

the serving central office and several customer locations within the same wire center. These nodes are connected with physically diverse routed fiber creating a closed loop. These rings will be OC-3 unidirectional path switched SONET technology, with an OC-3 add/drop multiplexer (ADM), configured in a ring mode, deployed at each node.

Like alternative #1, this architecture is targeted at DS1s that originate at a customer's premises and terminate at its serving central office. Performance monitoring will be furnished using the enhanced DS1 PM card on SONET based systems. This enhanced DS1 PM card should be deployed at both endpoints of the DS1.

### **Architectural Alternative #3**

Demand that goes beyond its serving wire center can be provisioned using alternative #3. The endpoints of special access DS1 demand are generally a customer's premises and an IC location.

Generally, this architecture consists of two rings which are interconnected at central office nodes, the IC access (and/or interoffice transport) ring and the customer access ring. The IC access ring consists of one or more IC nodes and two interconnecting central office nodes. Physically diverse fiber connects each IC node to its serving wire center and an alternate wire center. These rings must be interconnected at two central office nodes to ensure nodal survivability.

Additional central office nodes may also exist on the IC access ring to provide connectivity to other customer access rings. If the metropolitan area is large with demand across multiple SMARTPath service serving areas, a separate interoffice facility (IOF) ring may be deployed to provide connections between serving areas, to terminate DS1s at central office nodes beyond its serving wire center, and to provide connectivity between customer access rings.

The customer access ring will connect several customer nodes and the two interconnecting central office nodes (its serving wire center and an alternate central office) with diverse routed fiber. The customer nodes on a ring may be located in different wire centers. This ring will usually be an OC-3 unidirectional path switched ring.

At the IC nodes and the customer nodes, only DS1 interfaces are provided at this time.

At the two interconnection nodes, several interconnection alternatives exist. Interconnections between two OC-3 rings may be direct STS-1 connected or use a SONET WDCS to preserve STS-1 ports on the OC-3 ADM.



SONET WDCSSs will not be deployed at all interconnection nodes.

### **Software Package Requirements**

With SONET transport systems, specific software is required as part of the network element to support certain ring functions. Additionally, specific software is required to support SONET ring terminals features such as VT time slot assignment, performance monitoring capabilities, and dual ring inter-working schemes.

### **Pricing Structure**

SMARTPath service uses a new pricing structure which does not utilize traditional "Local Channel/Interoffice Channel/Mileage" pricing elements. Instead, SMARTPath service rates are based on three primary flat rate elements:

- SMARTPath Area Connection
- SMARTPath Area Junction
- SMARTPath Area Junction (Interconnection)

SMARTPath service pricing can be provided in the following pricing arrangements:

- Month-to-Month
- Under to Area Commitment Plan (ACP), or,
- Under the Channel Services Payment Plan (CSPP)

For locations requesting SMARTPath service and facilities are not available, special construction charges will apply.

Special construction charges do not apply for qualified locations within SMARTPath serving areas.

A service inquiry will be required for all requests.

Service intervals will be determined via the inquiry process and may be extended depending on the status of network deployment.

### **Channel Service Unit (CSU) Requirement**

SMARTPath service is a DS1 service, and required Extended Superframe (ESF) framing. An ESF-compatible CSU will be required at the customer's premises. Either AMI or B8ZS line coding options are available.

## **Tariff References/Price List References**

SMARTPath service is available for intraLATA service in the Florida, Georgia and Tennessee BellSouth service areas. The SMARTPath service tariff is located in section B7 of the state-specific Private Line Service Tariff.

## **Installation Intervals**

Normal Installation Intervals	NO
Project Coordination Required	YES

## **Service Inquiry and Ordering Guidelines**

SMARTPath service requests will always require the use of a service inquiry in CSPS.

## **Customer Education**

There is no formal training for SMARTPath service. However, if appropriate, customer education and training will be coordinated and/or administered through the Local Carrier Service Center (LCSC) or the appropriate Account Team.



**SMARTRING® SERVICE OC12**

# **SMARTRing® Service OC12**

## **CLEC Information Package**

### **Service Description**

Self-healing Multi-nodal Alternate Route Topology Ring Service (SMARTRing® service) OC12 is a dedicated, digital network with the capacity to transmit 12 DS3s between multiple customer-designated locations and Company Central Offices, where facilities can be made available as determined by the Company. This service is provided utilizing a dedicated network of SONET (Synchronous Optical Network) OC12 fiber optic transmission equipment nodes configured in a self-healing ring architecture. These nodes are connected by dedicated fiber routed through local, alternate central office, and interoffice facilities, which allow for transmission of DS3 services simultaneously over both a primary and protect path between the customer designated locations and Telephone Company Central Offices, and is specifically designed to survive in the event of a single catastrophic failure within the network (such as a cable cut). The system will monitor the quality of DS3 signals received over both the primary and alternate paths, and will take the best of the two signals; therefore, if a failure is detected within the network which blocks the signal received over one path, the signal being transmitted over the alternate path will be accepted, thereby ensuring the integrity of the network.

The SMARTRing® Service guarantee provides a credit equal to the monthly billing for the ring should a single failure of the Company's equipment result in a service outage of the entire system, and the system does not automatically self-heal around the point of failure within two and one half (2.5) seconds. In order to qualify for this credit, the customer must report the service interruption to the Company, and the trouble must be found in the Company equipment, based on information provided by the network surveillance system associated with the service. No more than one credit will apply for any given rate element for any given month, regardless of the number of interruptions occurring during that month.

The major service elements of the SMARTRing® architecture are the nodes, channels, and interfaces..

## **NODES**

Node types are: Central Office and Customer premises

Central office nodes are located in telephone Company central offices.

Customer Nodes are located in Customer designated premises other than central offices.

A ring must consist of at least three nodes - one Central Office Node located in a Telephone Company Central Office, one Customer Node located at the customer premises, and one other type node of the customer's choosing (central office or customer premises). Additional nodes may be any combination of Central Office or Customer Premises Nodes at the customer's discretion. The customer will choose where his Node locations will be placed, and based on that information, as well as customer requested routing information, Network will determine how facilities will be routed to connect those Node locations.

## **CHANNELS**

Channel types are local, alternate central office, internodal, and interoffice.

Local channels provide the communication path between Customer nodes and the serving wire center for the node location.

Alternate central office channels provide the communication path between customer nodes and a central office other than the serving wire center for the node location (provides an increased level of diversity).

Interoffice channels provide the communication path between directly connected central offices on the SMARTRing® whether or not a node is located in the central office.

The Internodal Channel provides for the communications path between two directly connected Customer Nodes located in the same serving wire center area, or in the same office park/campus environment or contiguous property, located in contiguous serving wire center areas.

## **INTERFACES**

SMARTRing® OC12 provides the capability to transmit up to 12 DS3 circuits. In order to enter and exit the ring, DS3 interfaces must be ordered at the originating and terminating nodes.

Customers wishing to connect DS1 services to an OC12 SMARTRing® in a Telephone Company Central office must obtain a 28 DS1 Channel System and the appropriate number of DS1 Channel Interfaces in lieu of the DS3 Channel Interface.

## **Tariff Reference**

SMARTRing® Service is available in all BellSouth service areas. The SMARTRing® Service Tariff is located in section B7 of each of the State Private Line Service Tariffs.

## **Installation Intervals**

Normal Installation intervals	<b><u>NO</u></b>
Project Coordination Required	<b><u>YES</u></b>

## **Service Inquiry and Ordering Guidelines**

Before a SMARTRing® Service Can be ordered a service inquiry for design must be submitted to determine availability and routing of fiber optic facilities. In addition, the information provided back to the initiator is required in order to develop an accurate price. This is because the channels are mileage sensitive in quarter mile increments. To place an order for SMARTRing® Service, the service inquiry for design must be resubmitted as a firm order request along with a Marketing Service request, and a signed contract (if applicable).

All of this documentation completion and submission will be performed by the OLEC Account Team.

## **Customer Education**

There is no formal training for SMARTRing® Service. However, if appropriate, Customer education will be coordinated and/or administered through the Local Carrier Service Center (LCSC) or the appropriate Account Team.





**SMARTRING® SERVICE OC3**